

### Information Requested from the Allen Steam Station

Responses to EPA Questions for Allen Steam Station are provided below. All CBI designated data is noted within each response and is provided in a separate submittal.

1. Please provide the type and source (i.e., mine name and location) of coal used at the plant each day from January 2012 through December 2013. In addition, please provide the sulfur and chlorine content of the coal used at the plant for each day of this period, if available. For days where coal blending occurred, please note the percentage of each type of coal used.

Response:

*The type and source of coal information for Allen Steam Station is being claimed confidential business information (CBI).*

*This information is contained in the "CBI Allen EPA Data Final 3\_28\_14" spreadsheet under tab "SE04643A2-AS". The station receives coal from several mines. The mine name and location provided is the predominant mine of the coal being burned from that basin on that day. This is generally an accurate representation of the coal being burn; however, for days when coal is reclaimed from the coal pile, it is not possible to identify the mine name and location. For coal blending, the percentage is an estimation of the percent of each coal being burned each day.*

*Coal data used at the plant from commencement of the FGD system (2/1/2009) to Dec. 2013 are provided. It is important to note that the FGD wastewater treatment system at Allen was designed, tested and constructed based on burning Central Appalachian (CAPP) coal.*

2. Please provide the following information for each day, beginning with the earliest date of sampling data you have provided through the end of 2013 (i.e., September 2009 through December 2013, if available:
  - a) Chloride concentration, pH, and average daily oxidation-reduction potential (ORP) values within each FGD scrubber system;

Response:

*Chloride concentration, pH and ORP values within each FGD scrubber system are provided in the "Allen EPA Data Final 3\_28\_14" spreadsheet under tab "Unit Data". Two absorbers are utilized at Allen (ABS 1 and ABS 3). Units 1, 2 and 5 are serviced by ABS 1 and Units 4 and 5 are serviced by ABS 3.*

- b) Chloride concentration, pH, and average daily ORP values for the influent to the FGD wastewater treatment system; and

Response:

*Only chloride concentration and pH are measured in the influent to the FGD wastewater treatment system. This information is provided in the "Allen EPA Data Final 3\_28\_14" spreadsheet under tab "Unit Data". These parameters are measured at sampling location SP-1.*

*Chloride concentration, pH and average daily ORP values are measured in the influent to the 1<sup>st</sup> stage bioreactor (sample point SP-2). This information is provided in the "Allen EPA Data Final 3\_28\_14" spreadsheet under tab "Unit Data".*

- c) Electric generation output (MW -hr) for each generating unit serviced by a FGD system.

*Response:*

*The electric generation output (MW-hr) for each generation unit serviced by a FGD system is provided in the "Allen EPA Data Final 3\_28\_14" spreadsheet under tab "Unit Data".*

**Additional Information:**

Nitrates-N concentration measured in the influent to the 1<sup>st</sup> stage bioreactor (SP-2) and effluent of the bioreactor (SP-3) are provided in the "Allen EPA Data Final 3\_28\_14" spreadsheet under tab "Unit Data".

Chemical dosing of the FGD wastewater treatment system is provided in the "Allen EPA Data Final 3\_28\_14" spreadsheet under tab "Unit Data".

Dates and amounts of the refined coal operations at Allen are provided in the "CBI Allen EPA Data Final 3\_28\_14" spreadsheet under tab "RC". This information is being claimed as CBI.

Analytical data from the influent to the FGD wastewater treatment system (SP-1), influent to the 1<sup>st</sup> stage bioreactor (SP-2) and effluent of the bioreactor (SP-3) from May 2010 to October 2013 are provided in the Allen EPA Data Final 3\_28\_14" spreadsheet under tab "Analytical". Associated analytical methods are provided under tab "Analytical Methods".

The analytical data from June 2011 to December 2013 demonstrates the variability of system performance due to the type of coal being burned and characteristics of constituents in the FGD scrubber.